

GAMING MACHINE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 60/529,717, filed December 15, 2003, the entire contents of which is hereby incorporated by reference.

BACKGROUND OF THE INVENTION

[0002] Various gaming machines and the like have been developed. Such games may include one or more video screens, rotating wheel devices, and/or displays for "progressive" games. Such games typically include a cabinet, and a front door providing access to the interior of the cabinets. The door typically includes a relatively large opening with one or more screens covering the opening and facing the user. Such screens may have various designs and the like relating to the game on the screen. Such screens may be made of a clear polymer material. Such gaming machines may include, for example, a reel device that is visible through a lower portion of the opening, and a video readout or the like that is visible above the reel devices in an upper portion of the opening in the door. Existing gaming machines may utilize a crossbar that extends across the opening to form upper and lower openings in the door, each opening providing viewing access to a video display or reel device. However, known crossbars are typically an integral portion of the door, and the doors are quite complicated, structural members due to the relatively large number of components such as game controls, speakers, electronics, and change counters, and the like that must be mounted to the door.

SUMMARY OF THE INVENTION

[0003] One aspect of the present invention is a gaming machine including a cabinet defining an internal space and a front side. The cabinet has an opening in the front side for providing access to the internal space. A door is movably mounted to the cabinet for movement between an open position providing access to the internal space, and a closed position wherein the door substantially closes off the opening in the cabinet. The door has an enlarged opening defining generally vertical spaced apart side edges. At least one sheet is mounted to the door, and extends across at least a portion of the opening in the door, wherein the sheet has an outside surface. A generally horizontal cross member extends across the enlarged opening, and has

opposite ends positioned adjacent the vertical side edges of the enlarged opening. The cross member is adjustably secured to the door such that the vertical position of the cross member can be adjusted to vary the size of an upper portion of the enlarged opening above the cross member, and a lower portion of the enlarged opening below the cross member.

[0004] Another aspect of the present invention is a gaming machine including a cabinet having an enlarged opening on a front side of the cabinet, and a door pivotably mounted to the cabinet. The door has an enlarged opening therethrough in registry with the enlarged opening in the cabinet when the door is in a closed position. The gaming machine further includes a bezel secured to the door, the bezel having an enlarged opening therethrough. A cross member is fastened to the bezel, and extends across the enlarged opening in the door.

[0005] These and other features, advantages, and objects of the present invention will be further understood and appreciated by those skilled in the art by reference to the following specification, claims, and appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Fig. 1 is a perspective view of a gaming machine according to one aspect of the present invention, wherein a video screen is mounted to the door above the crossbar, and a reel is mounted below the crossbar;

[0007] Fig. 2 is a partially fragmentary perspective view of the gaming machine of Fig. 1 with the door in the opened position;

[0008] Fig. 3 is a cross-sectional view of the door taken along the line III-III; Fig. 2;

[0009] Fig. 4 is a perspective view of a video gaming machine according to another aspect of the present invention, wherein the cross member is adjusted upwardly, and the gaming machine includes a small video screen above the crossbar, and a larger video screen below the crossbar;

[0010] Fig. 5 is a perspective view of the gaming machine of Fig. 4 with the door in the opened position; and

[0011] Fig. 6 is a perspective view of another aspect of the gaming machine of the present invention, wherein a progressive readout is located above the crossbar, and a video screen is located below the crossbar.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

[0012] For purposes of description herein, the terms "upper," "lower," "right," "left," "rear," "front," "vertical," "horizontal," and derivatives thereof shall relate to the invention as oriented in Fig. 1. However, it is to be understood that the invention may assume various alternative orientations and step sequences, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings and described in the following specification are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

[0013] With reference to Figs. 1 and 2, a gaming machine 1 according to one aspect of the present invention includes a cabinet 2 defining an internal space 3, and front side 4. The cabinet has an opening 5 in the front side 4 for providing access to the internal space 3. A door 6 is movably mounted to the cabinet 2 for movement between an opened position (Fig. 2) providing access to the internal space 3, and a closed position (Fig. 1) wherein the door 6 substantially closes off the opening 5 in the cabinet 2. The door has an enlarged opening 7 defining generally vertical spaced apart side edges 8. At least one sheet 9 is mounted to the door 6, and extends across at least a substantial portion of the opening 7 in the door 6. The sheet has an outside surface 10, and at least a portion 11 of the sheet is substantially transparent such that a person using the game can see through at least a portion of the sheet. A generally horizontal cross member 12 extends across the enlarged opening 7, and has opposite ends 13 positioned adjacent the vertical side edges 8. The cross member 12 is adjustably secured to the door 6, such that the vertical position of the cross member 12 can be adjusted in the direction of the arrow "A" (Fig. 1) to vary the size of an upper opening 14 formed above the cross member 12, and to adjust the size of a lower opening 15 formed below the cross member 12.

[0014] The gaming machine 1 illustrated in Figs. 1 and 2 includes a flat screen video display 16 that is mounted to a bezel 17 via brackets 18. The bezel 17 includes an upper opening 19 having a shape corresponding to the flat screen video display 16, and a lower opening 20 that permits a user to view reel devices 21 that may be installed to a shelf 22 in cabinet 2 utilizing

known brackets or the like. The sheet 9 may be a two-piece sheet having an upper sheet 23 and a lower sheet 24. The upper and/or lower sheets may include a series of ornamental designs or the like 25. In the illustrated example, the lower sheet 24 includes a plurality of see-through portions 26 that are substantially free from designs and the like to permit unobstructed viewing of the reel device 21, and also includes an area 27 that is coated to substantially prevent or restrict a user's ability to observe the other internal components of the gaming machine 1. The door 6 is a relatively large, structural member that is mounted to the cabinet 2 utilizing a plurality of hinges 28. The door 6 is made of a relatively strong material such as steel to support speakers 29, coin/money collector 30, and other electronic components such as the flat screen video display 16. A plurality of threaded fasteners 31 or the like secure the bezel 17 to the door. Various electrical components 32 are positioned within the cabinet 2. In the illustrated example, the flat screen video display 16 is connected to the components 32 providing for operation of the game via an electrical line 33, and the components 32 are positioned on an upper shelf 34. The reel device 21 may be positioned on the shelf 22, below the upper shelf 34, such that the reel device 21 is visible through the see-through portions 26 of lower sheet 24. The electrical components, reel device, and flat screen video displays are conventional components that are known to those skilled in the art, such that these components will not be described in detail herein.

[0015] With further reference to Fig. 3, door 6 includes side flanges 38, and inwardly sloping beveled surfaces 39 that extend to inner edges forming the vertical side edges 8 of the enlarged opening 7 in door 6. As discussed above, a plurality of threaded fasteners 31 or the like secure the bezel 17 to the door 6. The cross member 12 may include a plurality of threaded studs 40 or the like that extend through openings 41 in bezel 17. When installed, threaded nuts 42 are received on the studs 40, and draw the crossbar 12 securely against the beveled surface 39 of door 6, and against or adjacent the outer surface 10 of sheet 9, or adjacent upper and lower sheets 23 and 24, respectively. Because the vertical position of the cross member 12 can be easily changed by varying the location of the openings 41 in bezel 17, the gaming machine 1 can be readily reconfigured to accommodate various sizes of flat screen video displays 16, reel devices 21, and the like. Also, as discussed in more detail below, upper and lower flat display screens can be utilized, or a relatively small, "progressive" upper readout can be positioned

above the crossbar 12, and a reel device 21 or larger flat screen video display can be positioned below the crossbar 12. Because the bezel 17 is a relatively simple, flat member, the size of the upper and lower openings utilized to provide for the video displays and/or reel devices can be readily varied, without substantially modifying the overall structure of the door 6.

[0016] With further reference to Fig. 4, a gaming machine 50 according to another aspect of the present invention utilizes the same cabinet 2 and door 6. However, the gaming machine 50 includes a smaller upper electronic video display screen 51 and a larger, lower video display screen 52, each of which are mounted to a bezel 53 utilizing brackets 18. Openings 41 of bezel 53 are positioned somewhat higher than in the arrangement illustrated in Figs. 1 and 2, such that the crossbar 12 is positioned higher to accommodate the lower video display 52. An upper opening 54 in bezel 53 is sized to provide for viewing of the upper video display screen 51, and the lower opening 55 in bezel 53 is provided to view the lower video display 52. An upper sheet 56 and lower sheet 57 may each include see-through portions 58, and portions 59 having designs or the like. The electronics 32 provide for the various game functions in a known manner.

[0017] With reference to Figs. 6 and 7 a gaming machine 60 according to another aspect of the present invention may include a cabinet 2 and door 6 having the same configuration as described above. A bezel 61 is mounted to the door 6 in substantially the same manner as described in connection with the gaming machines of Figs. 1-5. The gaming machine 60 includes a "progressive" display 62 mounted to the bezel 61 via brackets 18, and a relatively large video display 63 that is also mounted to the bezel 61 via brackets 18. The bezel 61 includes an upper opening 64 configured to permit viewing of the progressive display 62, and a lower opening 65 permitting viewing of the lower video display 63 through the door 6. A plurality of gaming machines 60 may be interconnected via a network 67 and controller 66 to thereby provide for progressive poker or other such game.

[0018] The adjustable crossbar of the gaming machine of the present invention permits the gaming machine to be readily configured to provide for a large number of different sizes and combinations of display screens and/or reel devices or the like. The ability to provide a standard cabinet and door capable of use with a wide variety of video displays, reel devices,

and combinations thereof greatly simplifies the original fabrication process. Furthermore, the adjustable crossbar also permits the gaming machine to be reconfigured/retrofitted in the event the requirements concerning the size and/or types of video displays and/or reel devices changes.

[0019] In the foregoing description, it will be readily appreciated by those skilled in the art that modifications may be made to the invention without departing from the concepts disclosed herein. Such modifications are to be considered as included in the following claims, unless these claims by their language expressly state otherwise.